

Raymond Kassab
Dairy Mart Convenience Stores, Inc.
300 Executive Pkwy. West
Hudson, OH 44236

Re: Registered Construction and Operation Status,
019-11678-05191

Dear Mr. Kassab:

The application from Dairy Mart Convenience Stores, Inc. received on December 17, 1999, has been reviewed. Based on the data submitted and the provisions in 326 IAC 2-5.5, it has been determined that the following operation of one (1) portable and one (1) commercial vacuum truck soil and groundwater remedial system, to be located at a portable source, location no. 1- 1620 Charlestown-New Albany Pike; location no. 2 - Lot 18 of Waverly Subdivision; location no. 3 - 3810 Hamburg Pike; and location no. 4 - 3821 Hamburg Pike in Jeffersonville, Indiana, is classified as registered:

- (a) One (1) portable high vacuum extraction system, identified as remedial system #1, with a maximum extraction capacity of 3.46 pounds of volatile organic compounds (VOCs) per hour, using catalytic oxidizer as control, using a low explosive level detection monitor to monitor the VOC emissions, and exhausting to stack 1.
- (b) One (1) commercial high vacuum extraction system, identified as remedial system #2, with a maximum extraction capacity of 0.7946 pounds of volatile organic compounds (VOCs) per hour, using a Foxboro flame ionization detector and a Kurtz air velocity meter to monitor VOC emissions, and exhausting to stack 2.

The following conditions shall be applicable:

Pursuant to 326 IAC 5-1-2 (Opacity Limitations) except as provided in 326 IAC 5-1-3 (Temporary Exemptions), opacity shall meet the following:

- (a) Opacity shall not exceed an average of forty percent (40%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
- (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of 15 minutes (60 readings) in a 6-hour period as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor in a six (6) hour period.

Pursuant to 326 IAC 2-6 (Emission Reporting), the Permittee must annually submit an emission statement for the source. This statement must be received by April 15 of each year and must comply with the minimum requirements specified in 326 IAC 2-6-4. The annual statement must be submitted to:

Indiana Department of Environmental Management
Data Support Section, Office of Air Management
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

The annual emission statement covers the twelve (12) consecutive month time period starting December 1 and ending November 30.

This registration is revised registration issued to this source. The source may operate according to 326 IAC 2-5.5.

An authorized individual shall provide an annual notice to the Office of Air Management that the source is in operation and in compliance with this registration pursuant to 326 IAC 2-5.5-4(a)(3). The annual notice shall be submitted to:

Compliance Data Section
Office of Air Management
100 North Senate Avenue
P.O. Box 6015
Indianapolis, IN 46206-6015

no later than March 1 of each year, with the annual notice being submitted in the format attached.

An application or notification shall be submitted in accordance with 326 IAC 2 to the Office of Air Management (OAM) if the source proposes to construct new emission units, modify existing emission units, or otherwise modify the source.

Sincerely,

Paul Dubenetzky, Chief
Permits Branch
Office of Air Management

Spahi

cc: File - Clark County
Clark County Health Department
Air Compliance - Joe Foyst
Permit Tracking - Janet Mobley
Technical Support and Modeling - Michele Boner
Compliance Data Section - Karen Nowak

Dairy Mart Convenience Stores, Inc.
Jeffersonville, Indiana
Permit Reviewer: Spahi

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Registration Annual Notification

This form should be used to comply with the notification requirements under 326 IAC 2-5.5-4(a)(3)

Company Name:	Dairy Mart Convenience Stores, Inc.
Address:	300 Executive Pkwy. West
City:	Hudson, Ohio
Authorized individual:	Raymond Kassab
Phone #:	317-228-6849
Registration #:	019-11678-05191

I hereby certify that Dairy Mart Convenience Stores, Inc. is still in operation and is in compliance with the requirements of Registration 019-11678-05191.

Name (typed):
Title:
Signature:
Date:

Indiana Department of Environmental Management Office of Air Management

Technical Support Document (TSD) for a *Revised Registration*

Source Background and Description

Source Name: *Dairy Mart Convenience Stores, Inc.*
Source Location: *1620 Charlestown-New Albany Pike, Jeffersonville, Indiana*
County: *Clark*
SIC Code: *5541*
Operation Permit No.: **019-11678-05191**
Permit Reviewer: *Spahi*

The Office of Air Management (OAM) has reviewed an application from Dairy Mart Convenience Stores, Inc. relating to the construction and operation of one (1) portable and one(1) commercial vacuum truck soil and groundwater remedial system.

Permitted Emission Units and Pollution Control Equipment

The source consists of the following permitted emission units and pollution control devices:

- (a) One (1) portable high vacuum extraction system, identified as remedial system #1, with a maximum extraction capacity of 3.46 pounds of volatile organic compounds (VOCs) per hour , using catalytic oxidizer as control, using a low explosive level detection monitor to monitor the VOC emissions, and exhausting to stack 1.
- (b) One (1) commercial high vacuum extraction system, identified as remedial system #2, with a maximum extraction capacity of 0.7946 pounds of volatile organic compounds (VOCs) per hour, using a Foxboro flame ionization detector and a Kurtz air velocity meter to monitor VOC emissions, and exhausting to stack 2.

Existing Approvals

The source has been operating under previous approvals including, but not limited to, the following:

- (a) R 019-10455-05191, issued on January 13, 1999.

All conditions from previous approvals were incorporated into this permit.

Source Definition

The remediation will take place four (4) plants in Jeffersonville, Indiana:

- (a) Plant 1 is located at 1620 Charlestown-New Albany Pike:
- (b) Plant 2 is located at Lot 18 of Waverly Subdivision;
- (c) Plant 3 is located at 3810 Hamburg Pike; and
- (d) Plant 4 is located at 3821 Hamburg Pike.

These four(4) sites will be worked on. Plant 3 and 4 are located next to each other.

Stack Summary

Stack ID	Operation	Height (feet)	Diameter (feet)	Flow Rate (acfm)	Temperature (°F)
1	Portable Vacuum System	12.5	0.272	190	500
2	Commercial Vacuum System	9.5	0.218	190	500

Enforcement Issue

There are no enforcement actions pending.

Recommendation

The staff recommends to the Commissioner that the construction and operation be approved. This recommendation is based on the following facts and conditions:

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant.

An application for the purposes of this review was received on December 17, 1999, with additional information received on February 8, 2000.

Emission Calculations

See Appendix A of this document for detailed emissions calculations (1 Page.)

Combined Potential To Emit

Pursuant to 326 IAC 2-1.1-1(16), Potential to Emit is defined as “the maximum capacity of a stationary source or emissions unit to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or type or amount of material combusted, stored, or processed shall be treated as part of its design if the limitation is enforceable by the U. S. EPA, the department, or the appropriate local air pollution control agency.”

Pollutant	Potential To Emit (tons/year)
PM	0.0
PM-10	0.0
SO ₂	0.0
VOC	18.63
CO	0.0
NO _x	0.0

HAP's	Potential To Emit (tons/year)
Benzene	0.44
MTBE	1.05
Ethyl Benzene	0.31
Toluene	0.75
O-Xylene	0.35
M-Xylene	0.35
P-Xylene	0.35
TOTAL	3.60

- (a) The potential to emit (as defined in 326 IAC 2-5.5-1) of volatile organic compounds (VOCs) is less than twenty-five (25) tons per year and equal to or greater than ten (10) tons per year. Therefore, the source is subject to the provisions of 326 IAC 2-5.5-1.

County Attainment Status

The source is located in Clark County.

Pollutant	Status
PM-10	Attainment
SO ₂	Attainment
NO ₂	Attainment
Ozone	Moderate Nonattainment
CO	Attainment
Lead	Attainment

- (a) Volatile organic compounds (VOC) and oxides of nitrogen are precursors for the formation of ozone. Therefore, VOC and NO_x emissions are considered when evaluating the rule applicability relating to the ozone standards. Clark County has been designated as nonattainment for ozone. Therefore, VOC and NO_x emissions were reviewed pursuant to the requirements for Emission Offset, 326 IAC 2-3.
- (b) Clark County has been classified as nonattainment for volatile organic compounds (VOCs). Therefore, these emissions were reviewed pursuant to the requirements for Emission Offset, 326 IAC 2-3.

Portable Source

- (a) Initial Location
This is a portable source and its initial location is 3810 Hamburg Pike, Jeffersonville, Indiana.
- (b) PSD and Emission Offset Requirements
The emissions from this portable source were reviewed under the requirements of the

Prevention of Significant Deterioration (PSD), 326 IAC 2-2, 40 CFR 52.21, and Emission Offset, 326 IAC 2-3.

Source Status

Existing Source PSD, Part 70 or FESOP Definition (emissions after controls, based on 8,760 hours of operation per year at rated capacity and/ or as otherwise limited):

Pollutant	Emissions (ton/yr)
PM	0.0
PM10	0.0
SO ₂	0.0
VOC	15.15
CO	0.0
NO _x	0.0

- (a) This existing source is not a major stationary source because no attainment regulated pollutant is emitted at a rate of 250 tons per year or more, and it is not in one of the 28 listed source categories.
- (b) These emissions were based on the past permit issued to this source.

Total source after combination of previous permit and Proposed Modification

PTE from the proposed modification (based on 8,760 hours of operation per year at rated capacity including enforceable emission control and production limit, where applicable):

Pollutant	PM (ton/yr)	PM10 (ton/yr)	SO ₂ (ton/yr)	VOC (ton/yr)	CO (ton/yr)	NO _x (ton/yr)
Proposed Modification	0.0	0.0	0.0	18.63	0.0	0.0
PSD or Offset Threshold Level	250	250	250	100	250	250

This combination and modification to an existing minor stationary source is not major because the emission increase is less than the Emission Offset significant levels. Therefore, pursuant to 326 IAC 2-3, the Emission Offset requirements do not apply.

Part 70 Permit Determination

326 IAC 2-7 (Part 70 Permit Program)

This existing source, including the emissions from this permit 019-11678-05191, is still not subject to the Part 70 Permit requirements because the potential to emit (PTE) of:

- (a) each criteria pollutant is less than 100 tons per year,

- (b) a single hazardous air pollutant (HAP) is less than 10 tons per year, and
- (c) any combination of HAPs is less than 25 tons/year.

This status is based on all the air approvals issued to the source. This status has been verified by the OAM inspector assigned to the source.

Federal Rule Applicability

- (a) There are no New Source Performance Standards (NSPS)(326 IAC 12 and 40 CFR Part 60) applicable to this source.
- (b) There are no National Emission Standards for Hazardous Air Pollutants (NESHAPs)(326 IAC 14 and 40 CFR Part 63) applicable to this source.

State Rule Applicability - Entire Source

326 IAC 2-6 (Emission Reporting)

This source is subject to 326 IAC 2-6 (Emission Reporting), because it has the potential to emit more than ten (10) tons per year of volatile organic compounds (VOCs) and is located in Clark County. Pursuant to this rule, the owner/operator of the source must annually submit an emission statement for the source. The annual statement must be received by April 15 of each year and contain the minimum requirement as specified in 326 IAC 2-6-4. The submittal should cover the period defined in 326 IAC 2-6-2(8)(Emission Statement Operating Year).

326 IAC 5-1 (Visible Emissions Limitations)

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Exemptions), opacity shall meet the following, unless otherwise stated in this permit:

- (a) Opacity shall not exceed an average of forty percent (40%) any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
- (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings) as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

State Rule Applicability - Individual Facilities

326 IAC 8-1-6 (BACT)

The potential to emit (PTE) of the volatile organic compounds(VOCs) from each of the facilities is less than twenty-five(25) tons per year. Therefore, 326 IAC 8-1-6 does not apply.

Conclusion

The construction and operation of this one (1) portable and one (1) commercial vacuum truck soil and groundwater remedial system shall be subject to the conditions of the attached proposed Revised Registration 019-11678-05191.

VOC EMISSIONS:

Portable Vacuum Truck:

Highest measured hourly VOC emission rate from the portable vacuum truck = 3.46 lbs VOC/hr
= 3.46 lbs VOC/hr x 8760 hrs/yr x 1ton/2000 lbs
=15.15 tons VOC/yr

Commercial Vacuum Truck:

Highest measured monthly VOC emission rate from the commercial vacuum truck
= 1319.8 lbs VOC/1837.4 hrs = 0.7946 lbs VOC/hr
= 0.7946 lbs VOC/hr x 8760 hrs/yr x 1 ton/2000 lbs
= 3.48 tons VOC/yr

Total potential to emit (PTE) VOC emissions from the source = (15.15 + 3.48) tons VOC/yr
= 18.63 tons VOC/yr

HAP EMISSIONS:

Maximum hourly emission rate of benzene = 0.1 lbs/hr
=0.1 lbs/hr x 8760 hrs/yr x 1 ton/2000 lbs
= 0.44 tons benzene/yr

Maximum hourly emission rate of MTBE = 0.24 lbs/hr
= 0.24 lbs/hr x 8760 hrs/yr x 1 ton/2000 lbs
= 1.05 tons MTBE/yr

Maximum hourly emission rate of ethyl benzene = 0.07 lbs/hr
= 0.24 lbs/hr x 8760 hrs/yr x 1 ton/2000 lbs
= 1.05 tons MTBE/yr

Maximum hourly emission rate of toluene = 0.17 lbs/hr
=0.17 lbs/hr x 8760 hrs/yr x 1 ton/2000 lbs
= 0.75 tons toluene/yr

Maximum hourly emission rate of o-xylene = 0.08 lbs/hr
= 0.08 lbs/hr x 8760 hrs/yr x 1 ton/2000 lbs
= 0.35 tons o-xylene/yr

Maximum hourly emission rate of m-xylene = 0.08 lbs/hr
= 0.08 lbs/hr x 8760 hrs/yr x 1 ton/2000 lbs
= 0.35 tons m-xylene/yr

Maximum hourly emission rate of p-xylene = 0.08 lbs/hr
= 0.08 lbs/hr x 8760 hrs/yr x 1 ton/2000 lbs
= 0.35 tons p-xylene/yr

Total HAPs = (0.44 + 1.05 + 0.31 + 0.75 + 0.35 + 0.35 + 0.35) = 3.60 tons HAPs/yr